

Smart Grid Assets and Functions

Assets	Functions														
	Smart Grid													Other	
	Fault Current Limiting	Wide Area Monitoring, Visualization, and Control	Dynamic Capability Rating	Power Flow Control	Adaptive Protection	Automated Feeder and Line Switching	Automated Islanding and Reconnection	Automated Voltage and VAR Control	Diagnosis & Notification of Equipment Condition	Enhanced Fault Protection	Real-Time Load Measurement & Management	Real-time Load Transfer	Customer Electricity Use Optimization	Separation of Electricity Generation from Electricity Use	Local Production of Electricity
Smart Grid															
Advanced Interrupting Switch										•					
AMI/Smart Meters								•			•		•		
Controllable/regulating Inverter							•	•							
Customer EMS/Display/Portal													•		
Distribution Automation					•	•	•	•				•			
Distribution Management System			•		•	•	•	•			•	•			
Enhanced Fault Detection Technology										•					
Equipment Health Sensor			•						•						
FACTS Device				•											
Fault Current Limiter	•														
Loading Monitor			•						•			•			
Microgrid Controller							•								
Phase Angle Regulating Transformer				•											
Phasor Measurement Technology		•	•	•	•		•	•		•					
Smart Appliances and Equipment (Customer)													•		
Software - Advanced Analysis/Visualization		•	•												
Two-way Communications (high bandwidth)		•			•	•	•	•			•	•			
Vehicle to Grid Charging Station													•		
Very Low Impedance (High Temperature Superconducting) cables				•											
Other															
Inverter								•							
Distributed Generator (diesel, PV, wind)															•
Electricity Storage device (e.g., battery, flywheel, PEV etc)														•	

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